

11. The optical system according to claim 1, wherein the third lens unit includes at least one positive lens and at least one negative lens and the following conditional expression is satisfied:

$$1.02 < |fGkp/fGkn| < 2.50$$

where $fGkp$ is a focal length of a positive lens which is included in the third lens unit and is a closest positive lens with respect to the image side and $fGkn$ is a focal length of a negative lens which is included in the third lens unit and is a closest negative lens with respect to the image side.

12. The optical system according to claim 1, wherein the third lens unit includes a positive lens Gkp disposed closest to the image side and a negative lens Gkn disposed adjacent to the positive lens Gkp on the object side.

13. The optical system according to claim 1, wherein the third lens unit has negative refractive power.

14. An imaging apparatus comprising:

an optical system; and

an image sensor configured to receive light of an image formed by the optical system,

wherein the optical system includes a first lens unit having a positive refractive power, a second lens unit, and a third lens unit disposed in order from an object side to an image side,

wherein the second lens unit moves in focusing so that an interval between adjacent lens units among the first, second, and third lens units changes,

wherein the first lens unit includes a positive lens $G1p$ disposed closest to the object side and a negative lens $G1n$ being a closest negative lens with respect to the object side, and

wherein the following conditional expressions are satisfied:

$$0.02 < BF/fG1p < 0.14$$

$$2.00 < |fG1p/fG1n| < 10.00$$

$$20.0 < vdG1n < 40.0$$

$$-0.1000 < \theta gFG1n - (-1.665 \times 10^{-7} \times vdG1n^3 + 5.213 \times 10^{-5} \times vdG1n^2 - 5.656 \times 10^{-3} \times vdG1n + 0.7268) < -0.0010$$

where BF is a back focus of the optical system, $fG1p$ is a focal length of the positive lens $G1p$, $fG1n$ is a focal length of the negative lens $G1n$, $vdG1n$ is an Abbe number of a material of the negative lens $G1n$, and $\theta gFG1n$ is a partial dispersion ratio of the negative lens $G1n$.

15. The imaging apparatus according to claim 14, wherein the following conditional expression is satisfied:

$$0.05 < BF/IH < 2.20$$

where IH is a maximum image height of the imaging apparatus.

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